



Muscatine Power and Water

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APCO

May 20, 2014

Mr. Mark Smith
Chief, Air Permitting and Compliance Branch
Environmental Protection Agency - Region 7
11201 Renner Blvd.
Lenexa, KS 66219

**Re: Mercury and Air Toxics Standard (MATS) Extension Request for
Muscatine Power and Water - Plant Number 70-01-011/
Operating Permit No. 98-TV-021R2**

Dear Mr. Smith:

As you are aware, the United States Environmental Protection Agency (USEPA) finalized the Mercury and Air Toxics Standard (MATS) on December 21, 2011. Muscatine Power and Water's (MP&W) coal-fired boilers Unit 8 (EP-80) and Unit 9 (EP-90) will not be able to comply with the compliance timeline required by the MATS. Pursuant to 40 CFR 63.6(i)(4)(i)(A), MP&W requests that the USEPA grant an extension allowing Units 8 and 9 an additional year (April 16, 2016) to comply with the standard. It is expected that the Iowa Department of Natural Resources (IDNR), will be delegated the authority to implement and enforce the emission standards by the original, pre-extension compliance date and the IDNR has been copied on this request.

MP&W is currently developing plans and permit applications to install a suite of equipment at the MP&W Generation Site that will control emissions to meet the MATS requirements, including the use of refined coal (CHEM MOD™), and the addition of a sorbent/powdered activated carbon (PAC) injection system. Due to the scale of the emission controls and equipment contemplated, MP&W needs the additional time to design, finance, procure, test, install, and shakedown the newly installed equipment. The schedule must allow for continued operation of the Unit 8 and 9 boilers to provide a continuous supply of reliable power to our customer/owners. In addition, scheduling of MP&W's generation assets must be coordinated with the Midcontinent Independent System Operator (MISO). Coordination of generation outages within MISO is expected to become more difficult as many MISO member utilities begin scheduling outages to meet the same compliance deadline.

As allowed under the Clean Air Act and in accordance with the requirements of 40 CFR §63.6(i)(6)(i), we provide the following information to support MP&W's request:

1. Controls to be Installed. The proposed Air Quality Control (AQC) equipment for Units 8 and 9 includes CHEM MOD™ and sorbent/PAC injection equipment. MP&W recently completed initial demonstration testing for sorbent/PAC using temporary portable equipment. The results of this demonstration testing are currently under detailed review by an engineering consultant, as well as MP&W's internal Engineering and Environmental staff. Preliminary results of the testing showed some success with PAC injection, but the detailed review of the data may create additional testing and/or control equipment evaluation/design recommendations.

2. Compliance Schedule.

a. The date by which on-site construction, installation of emission control equipment or a process change is planned to be initiated.

Onsite construction of the CHEM MOD™ equipment was initiated in October 2013, and construction completed in January 2014. Onsite construction of sorbent/PAC injection equipment is planned for initiation around August 2015. After a comprehensive review of the sorbent demonstration testing is complete and any necessary follow-up testing conducted, final system designs and engineering specifications will be developed, bids received, board approval(s) obtained, permit applications prepared, and necessary construction permits received. Based on the projected timeline of each of these steps, August 2015 is the earliest date in which MP&W expects to be able to initiate on-site construction. This timeline faces potential delays due to contractor availability and equipment lead time due to the rapid increase in sorbent injection equipment installations associated with MATS compliance. Early construction work will include pouring of new foundations, which will need to be completed several weeks before the injection equipment can be installed.

b. The date by which on-site construction, installation of emission control equipment or a process change is to be completed.

Onsite installation of CHEM MOD™ equipment was completed in January 2014; before construction is considered complete, a shakedown period will follow the installation of the equipment to ensure the system operates as designed and in coordination with the planned sorbent/PAC equipment.

Onsite installation of sorbent/PAC injection equipment at Unit 8 is planned to be completed in October 2015. Onsite installation of sorbent/PAC equipment for Unit 9 is planned to be completed in late 2015 (possibly as early as November 2015) or early 2016. Installation of the injection equipment is not the final stage of construction because a shakedown period will be required after equipment is installed to ensure the system functions as designed and any necessary operational adjustments can be made. A significant shakedown period will be required for these Units due to the complex chemistry involved with the use of

refined coal and sorbent/PAC injection. Sorbent/PAC injection will also affect the operation of the boilers, which will require time for MP&W operations staff to tune and adjust as necessary. In addition, Unit 9 may also require additional injection chemicals to address mercury re-emission in its FGD system, a well-known phenomenon with wet FGD systems. This could further extend the shakedown period for this Unit.

c. The date by which final compliance is to be achieved.

The Final Compliance Date for both Units 8 and 9 is planned for April 15, 2016 when both CHEM MOD™ and sorbent/PAC injection equipment have been installed and the shakedown period described above has been completed.

Pursuant to 40 CFR §63.6(i)(12)(i), MP&W requests written approval of the one-year MATS extension, to April 16, 2016, for all applicable deadlines in the MATS, including calendar date deadlines in Subpart UUUUU and applicable provisions of Subpart A. To ensure clarity regarding the Subpart A requirements, MP&W requests a waiver of initial performance testing, recordkeeping, and reporting requirements or an explicit statement that the extension also applies to Subpart A requirements. In addition, since Units 8 and 9 are both on the same site, an emission averaging plan that averages output for both Units could be applicable and MP&W will be evaluating this option using the results of the planned demonstration test(s). Therefore, MP&W requests discussion with the EPA to ensure common understanding of how the extension would work for this situation. Specifically, MP&W believes the one-year deadline extension applicable to the compliance date should also be applicable to deadlines associated with emission averaging planning, notifications, and approvals.

If you have questions or need additional information regarding this request, please contact me at 563-262-3310/bolson@mpw.org or our Environmental Affairs Manager, Jean Brewster at 563-262-3259/jbrewster@mpw.org.

Sincerely,



Brandy D. Olson
Director, Legal & Regulatory Services
Muscatine Power & Water

cc Mr. Chuck Gipp, Director
Iowa Department of Natural Resources
Wallace State Office Building
502 E 9th Street
Des Moines, Iowa 50319

Jean Brewster, Environmental Affairs Manager